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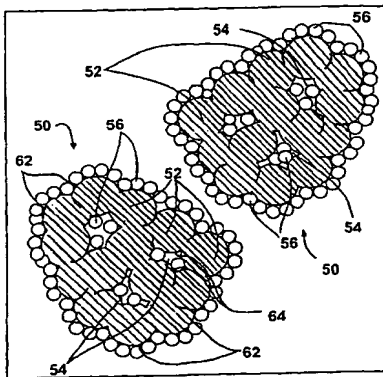
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- (71) Applicant (for all designated States except US): **OMNIPURE FILTER COMPANY** [US/US]; 1904 Industrial Way, Caldwell, ID 83605 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **REID, Roger, P.** [US/US]; 1904 Industrial Way, Caldwell, ID 83605 (US).  
**SAASKI, Bruce** [US/US]; 1904 Industrial Way, Caldwell, ID 83605 (US).
- (74) Agents: **PEDERSEN, Ken, J.** et al.; Pedersen and Company, PLLC, P.O. Box 2666, Boise, ID 83701 (US).
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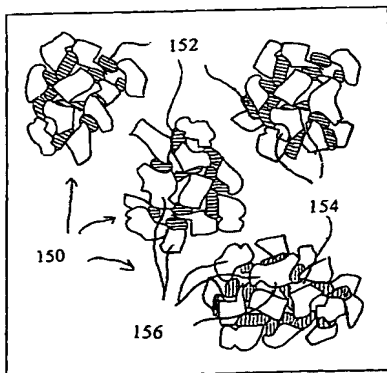
[Continued on next page]

(54) Title: FILTRATION MEDIA COMPRISING GRANULES OF BINDER-AGGLOMERATED ACTIVE COMPONENT



3A

(57) **Abstract:** Granules comprise binder-agglomerated active particles for liquid treatment or filtration. Each granule has a center core of a material that itself has binding properties without the addition of other binders or sprays or adhesives, or, alternatively, each granule comprises a matrix of active materials stuck together with the binder. The binder structure preferably ranges from a non-uniform matrix of binder formed by heat-deformed binder particles, to a clump of binder particles generally retaining the original shape or the binder particles, to non-continuous connectors of binder between active particles. The invented two-part media has high surface area per volume of media, which, because the outer surface and inner void surfaces of the particles are preferably substantially covered with active particles, translates to high activity for the preferred treatment process. Therefore, while a mixture of active particles may be used and a mixture of binders may be used, each media granule preferably consists only of a matrix, clump, or plurality of connectors of binder coated with active particles, with preferably no support for the active component other than the binder material.



3B

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

Internat Application No  
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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B01J20/26 B01J20/32 B01D53/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01J B01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 4 102 816 A (D.L.STALLIG ET AL.) 25 July 1978 (1978-07-25)  the whole document	1,3-6, 13,15, 24,31
A	GB 2 013 102 A (H.V.BLÜCHER ET AL.) 8 August 1979 (1979-08-08) page 3, line 62 - line 85; claims 1,7; figure 1	1,3,6
A	US 5 332 426 A (Y.-M.TANG ET AL.) 26 July 1994 (1994-07-26) column 3, line 31 - line 61; claims 1,23; figure 1	1-4
A	US 4 041 961 A (A.J.SHALER ET AL.) 16 August 1977 (1977-08-16) examples	1,4
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Bertram, H.

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Internat<sup>l</sup> Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 5 639 550 A (R. LISENKO) 17 June 1997 (1997-06-17) cited in the application the whole document</p> <p>-----</p>	1

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